What is claimed is:

1. A glass-processing method incorporating the heating of a glass body by using a thermal plasma torch that comprises:

(a) a main body provided with a plurality of ports from which a gas issues; and

(b) a device for applying a high-frequency electric field to the gas fed into the main body;

the method comprising the steps of:

(1) adjusting the size of a plasma flame produced by the torch perpendicular to the center axis of the main body of the torch by controlling the flow rate of the gas fed into each of the ports in accordance with at least one of (1a) the size of the glass body and (1b) the processing condition; and

(2) heating the glass body.

2. A glass-processing method as defined by claim 1, wherein the gas to be fed into each of the ports has the same composition.

3. A glass-processing method as defined by claim 1, wherein:

(a) as the gas, at least two types of gases are used; and

(b) each of the at least two types of gases is fed into a different port from one another in the ports.

4. A glass-processing method as defined by claim 1, wherein in the step of adjusting the size of a plasma flame, the controlling of the flow rate of the gas is performed through the substeps of:

(a) measuring the temperature distribution of the glass body; and

(b) controlling the flow rate based on the measured result of the temperature distribution.

5. A glass-processing method as defined by claim 1, wherein:

(a) a gas to be transformed into a plasma is fed into a port or ports positioned at the inner portion of the arrangement of the ports;

(b) a gas to be used as a sealing gas is fed into a port or ports positioned at the outer portion of the arrangement of the ports; and

(c) in the step of adjusting the size of a plasma flame, the size is adjusted by varying the flow rate between the gas to be transformed into a plasma and the gas to be used as a sealing gas.

6. A glass-processing method as defined by claim 1, wherein the glass body is an optical fiber preform.

7. A glass-processing method as defined by claim 1, wherein:

(a) the glass body is a glass pipe; and

(b) the step of heating the glass pipe comprises the substeps of:

(b1) introducing into the glass pipe a material gas for forming minute glass particles; and

(b2) heating the glass pipe with the thermal plasma torch that relatively traverses along the glass pipe to deposit the minute glass particles on the inner surface of the glass pipe.

8. A glass-processing method as defined by claim 7, the method further comprising, in succession to the step of heating the glass pipe, the steps of:

(3) adjusting the size of the plasma flame again; and

(4) heating the glass pipe to form a solid body.

9. A glass-processing method as defined by claim 1, wherein the gas is at least one of argon, oxygen, nitrogen, helium, and air.

10. A glass-processing method as defined by claim 1, wherein the gas has a dew point of at most 0 ℃.

11. A glass-processing method as defined by claim 10, wherein the gas has a dew point of at most -50 ℃.

12. A glass-processing apparatus, comprising:

(a) a thermal plasma torch for heating a glass body, comprising:

(a1) a main body provided with a plurality of ports from which a gas issues; and

(a2) a device for applying a high-frequency electric field to the gas fed into the main body; and

(b) a device for adjusting the flow rate of the gas fed into each of the ports.

13. A glass-processing apparatus as defined by claim 12, the apparatus further comprising a moving device capable of moving the thermal plasma torch forward and backward with respect to the glass body.

14. A glass-processing apparatus as defined by claim 13, the apparatus further comprising:

(a) a device for measuring the temperature distribution of the glass body; and

(b) a control unit for adjusting the temperature distribution based on the measured temperature distribution by controlling at least one of (b1) the de-

vice for applying a high-frequency electric field, (b2) the device for adjusting the flow rate, and (b3) the moving device.